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### CLAIMS

1. A respirator for covering at least the face of the wearer and incorporating a visor positioned to enable the wearer to see, said respirator  
5 defining within a main volume into which air may be drawn from the exterior via a primary filter, and a secondary volume positioned so as to enclose the nose and mouth of the wearer, said respirator being characterised in that a secondary filter is provided to filter gas passing from the main volume to the secondary volume.  
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2. A respirator as claimed in claim 1 wherein the secondary volume takes the form of an oronasal mask having a resilient seal along its locus of contact with the face of the wearer.
- 15 3. A respirator as claimed in either one of claims 1 or 2 wherein air is drawn into the main volume from the exterior via a primary inlet port to which is fitted said primary filter.
4. A respirator as claimed in claim 3 wherein said inlet port is further  
20 fitted with a one-way valve operable to allow air into the main volume from the exterior, but not in the reverse direction.
5. A respirator as claimed in claim 4 wherein said one-way valve is located downstream of the primary filter. .  
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6. A respirator as claimed in any one of the preceding claims in which a further one-way valve is fitted in the air flow from the main volume to the secondary volume, said further one-way valve being operable to allow air into the secondary volume from the primary volume, but not in the  
30 reverse direction.

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7. A respirator as claimed in claim 6 wherein said further one-way valve is located downstream of the secondary filter.
8. A respirator as claimed in any one of the preceding claims  
5 wherein the inlet for air to be passed from the main volume to the secondary volume is located on the opposite side of the main volume to said primary inlet port so that air, in passing from said primary inlet port to said inlet passes across the visor.
- 10 9. A respirator as claimed in claim 8 further comprising a conduit whose inlet comprises said inlet for air to be passed from the main volume to the secondary volume and which terminates in a secondary inlet port through which air flows into the secondary volume.
- 15 10. A respirator as claimed in claim 9 wherein the inlet to the conduit is situated on the opposite side of the main volume to the primary inlet port and the outlet of the conduit is situated on the same side of the main volume as the primary inlet port.
- 20 11. A respirator as claimed in either one of claims 9 or 10 wherein said secondary filter is fitted in said conduit.
12. A respirator as claimed in any one of the preceding claims wherein said secondary volume is further fitted with an exhale valve  
25 whereby air may be expelled to the exterior.
13. A respirator as claimed in any one of the preceding claims wherein the secondary volume comprises a separate self contained volume within the main volume, having its own seal against the wearer's face  
30 separate from that of the main volume.